



Leveraging Knowledge & Technology to Achieve Optimal Performance

GSA Schedule 03FAC

GSA Contract No. GS21F0010X

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Company Introduction

Building Confidence Since 1921

Corval Group began as a construction company that quickly earned the confidence of its clients.

As our clients' needs grew, our organization grew into a collection of companies offering a wide range of services. These companies included many industry leaders ranging from NewMech and Lawdan Industries to Verdi Construction and National Commissioning Services.

Today, we are no longer simply a collection of great individual firms but one fully integrated company offering a seamless array of Construction, Fabrication and specialized Business Solutions.

Best of all, we are proud to report that after more than 85 years in business, our clients are more confident in our abilities than ever.

NCS, a Corval Group company, is a leading provider of mechanical and electrical building systems commissioning to clients nationwide. Our clients include companies within the development, engineering, construction, contracting and facility management industries.

NCS utilizes CorSoft management software to share project information and facilitate effective collaboration throughout the development and execution of the Project Commissioning Plan.

Commissioning Services

- New Construction (Commercial, Office, Federal, Medical & Industrial)
- Ongoing Commissioning
- Retro-commissioning
- Commissioning Program Management
- Development of Master Specifications
- Procurement Assistance (Buyout) of Mechanical and Electrical Packages
- MEP Contract Reviews
- Design Reviews
- LEED Certification Management/Energy Modeling





Capability Statement

National Commissioning Services

NCS is your source for specialized business solutions designed to drive bottom line results. From financing to energy optimization and technology application to commissioning and project risk management, you can count on us to have the specialized experience and expertise you need.

When you partner with NCS, you can be confident that no problem is too big for us to solve and no detail too small for us to give it our expert attention. To learn more about how our team of Energy Solutions professionals can help you meet your objectives, please contact us today.

Corval Group, Inc.

Corval Group is a fully integrated Construction, Fabrication and Business Solutions Company serving customers across North America. Our clients come to us for our experience and expertise in a wide range of markets including:

- Power
- Petrochemical/ Refining
- Alternative Energy
- Industrial
- Commercial/Retail
- Food & Beverage
- Schools/Universities
- Pharmaceutical/Biotech

When you hire the Corval Group, you can be confident we will:

- Meet all of your Construction, Fabrication and Business Solutions needs.
- Partner with you to safely optimize project, process and facility performance.
- Provide specialized expertise in project development, engineering and technology management.
- Offer the seamless program management you need to drive efficiency, quality and cost savings.
- Deliver reliable, consistent results on every project regardless of scope, budget or timeline.





Energy Management Principles

National Commissioning Services (NCS) is a <u>nationally based mechanical and electrical building systems commissioning provider</u>. Our clients include companies within the development, engineering, construction, contracting and facility management industries.

Our Mission is to provide <u>consistent</u>, <u>high quality mechanical and electrical building system commissioning services</u> for our clients, from concept through revenue generation.

Our Goal for every project is to <u>assist our clients in reaching their facility performance goals</u>. These goals can range from ensuring a project is complete to achieving specific facility performance requirements.

Our Process utilizes CorSoft (facility and performance management software) to <u>share project information across an experienced and diversified team</u> throughout the development and execution of the Project Commissioning Plan.

Our Experience includes over <u>10,000,000 square feet of facility commissioning experiences</u> for both Plan Spec and Design Build projects throughout the US. These facilities include commercial, industrial, Federal, medical and institutional.

The Commissioning Scope of Services we provide <u>meets all project LEED and Energy Modeling Requirements.</u>

Simply stated, NCS has the expertise and resources required to provide federal customers with a broad spectrum of energy management services with a keen awareness of the unique challenges associated with the federal procurement process and energy management mandates. We will work to help agencies adapt to the demands of Executive Order 13423, the Energy Policy Act of 2005 (EPAct 2005), and the Energy Security Independence Act 2007 (ESIA 2007), with the expertise required to develop and implement innovative energy management solutions and services.





Group Name: Energy Management, Water Conservation and Support Services

Special Item Numbers (SINs) associated with this contract are listed below, along with a sampling of SIN specific services which may be provided by NCS. Please note that examples provided are not necessarily indicative of the limits of NCS capabilities and additional services may be provided under each SIN.

SIN 871-202 — Energy Management Planning and Strategies

A four-phase Comprehensive Energy Management Solution consisting of all four phases of an energy project and could pertain to a variety of energy projects that include, but are not limited to, renewable energy, sustainable energy, and energy efficient buildings certification programs such as LEED.

- Consulting/Auditing/Energy Management Solutions This includes the strategic planning, energy assessments e.g. feasibility, vulnerability and other detailed assessments, developing and executing of energy audits, audit plans, renewable energy surveys and energy management solutions.
- 2. Concept Development and Requirements Analysis This includes the analysis of the audit results and outlined requirements to design a detailed energy management project concept.
- 3. Implementation and Change Management This includes the implementation and integration of more energy efficient practices and systems and training in using them effectively.
- 4. Measurement and Verification This includes the performance assessment and measurement of the effectiveness and energy efficiency of the project and can include long term monitoring, verification of savings and benchmarking.

SIN 871-203 — Training on Energy Management

Including, but not limited to, training of operations & maintenance personnel in order to support reducing energy consumption, mitigating risk with energy systems, operating systems efficiently, making energy efficient system choices, and supporting energy efficient buildings certification programs such as LEED.

SIN 871-204 — Metering Services

Including, but not limited to, the installation of metering equipment and software used for the collection of data and measurement of energy consumption through electric, gas, water or steam utilities, the utilization of data to ensure energy conservation goals are being met, and allows for the measurement and tracking of the cost effectiveness of energy technology investments. This could include basic metering services, advanced metering services, maintenance, installation, removal and disposal of new or existing equipment.

Below is a sampling of services NCS can provide under this SIN:

- All scales and complexities of metering services
- Installation of metering equipment and associated software





- Maintenance, installation, and removal of equipment
- Trend analysis of metered equipment
- Energy planning and strategies designed to maintain compliance with federal policy, statutory requirements and facility performance goals.

SIN 871-205 — Energy Program Support Services

Including, but not limited to, energy choice analysis and/or feasibility studies; billing and management oversight to include utility bill auditing; utility bill data base set up and management; reporting; bill itemization and allocation; bill payment and assistance in preparing energy services related agency statements of work. Energy efficient buildings certification programs such as US Green Building Council LEED program are also included.

SIN 871-206 — Building Commissioning Services

With a combined 30 years of Total Building Commissioning experience, NCS is a leading provider of mechanical and electrical building systems commissioning to clients nationwide. Our clients include companies within the development, engineering, construction, contracting and facility management industries. NCS utilizes CorSoft management software to share project information and facilitate effective collaboration throughout the development and execution of the Project Commissioning Plan.

The commissioning process can also be applied to existing buildings that have never been commissioned in order to restore them to an optimal level of performance. Retro-commissioning (Cx) is a systematic, documented process that identifies operational, maintenance and capital improvement opportunities in existing buildings, which are intended to facilitate optimization of facility performance per the original design intent for the building.

The RCx process typically focuses on energy-consuming equipment such as mechanical, electrical, plumbing, lighting and related controls with the intent to optimize existing system performance rather than relying on major equipment replacement. This typically results in improved indoor air quality, comfort, controls, energy and resource efficiency.

RCx typically includes an audit of the entire building including a study of past utility bills, interviews with facility personnel. Then diagnostic monitoring and functional tests of building systems are executed and analyzed. Building systems are retested and monitored to fine-tune improvements. This process helps find and repair operational problems. The identification of more complex problems is presented to the owner as well. A final report, ongoing commissioning plan and schedule are then given to the owner.

Our services under this SIN include, but are not limited to, comprehensive building commissioning services on new construction, major modernization projects, and existing energy consuming buildings and facilities designed to ensure the building systems are designed and built to operate as efficiently as possible. This includes re-commissioning and retro-commissioning services. Energy efficient buildings certification programs such as LEED may be included.





SIN 871-207 — Energy Audit Services

NCS provides energy audit services ranging from cursory to comprehensive. Services include, but are not limited to, developing, executing, and reporting on audit plans and/or perform energy and water audit services. These audits include data collection, data analysis, benchmarking with tools such as Energy Star, along with written recommendations of suggested upgrades of electrical and mechanical infrastructure, including their impact on energy consumption. Recommendations resulting from audit finding may also include recommendations for using alternative energy sources and possible pursuit of LEED certification during retrofitting of facility.

Below are activities and deliverables which may be provided under this SIN:

- Energy audit services
- Utility data collection and trend analysis
- Engineering analysis of audit findings
- Low cost/no cost improvement lists
- Planning & investigative phase plans and reports.
- Cursory to comprehensive energy and water audit services
- Data collection, data analysis, and benchmarking with tools such as EnergyStar
- Life cycle cost analysis of Energy Conservation Opportunities (ECO) identified during audit
- Energy-efficient buildings certification programs support, such as LEED

SIN 871-209 — Innovations in Energy

NCS has the experience and expertise necessary to provide our clients with innovative approaches to renewable and sustainable energy, sustainability services, and energy management technology and services. These might include, but are not limited to, new developments or improvements in providing renewable energy and managing energy through biomass conversion, solar energy, fuel cells, geothermal energy, hydropower (tidal power, wave power, tidal stream power, waterwheels, and hydro electricity), wind power or other sources. These approaches should be capable of providing renewable and/or sustainable energy and sustainability services that are more carbon-neutral, thereby lessening dependence on traditional non-renewable, fossil fuel sources of energy such as coal, oil, natural gas and propane. This could include sustainability and carbon management solutions such as analysis, foot printing, measuring, mitigation, verification and management, training on new energy technologies and systems, life-cycle costing, and maintenance and operational support of renewable energy systems; and the implementation, testing and evaluation of networked energy management systems and services that utilize Internet Protocol - Next Generation (JPv6) enabled systems that are configured using open standards architecture that can include Power over Ethernet (POE) implementation, wireless configurations, data security using IPSEC or 128 DES Encryption standards, high reliability, NIST compliant, and demonstrated energy efficiencies or cost savings, and are capable of integrating with existing information systems data infrastructure and backbone.





SIN 871-211 — Energy Consulting Services

NCS will provide expert advice, assistance, guidance or counseling on energy related projects or initiatives to assist agencies in adhering to energy legislation and policy such as EPACT 2005, Executive Orders 13423 and 13514. Consulting services covered by this SIN include: Energy management or strategy; Energy program planning and evaluations; Energy related studies, analyses, benchmarking and reporting such as feasibility studies vulnerability assessments; and energy security assistance in meeting energy efficient building standards such as Leadership in Energy and Environmental Design (LEED), Green Globes and Energy Star. Advisory services in obtaining alternative financing for energy projects such as Energy Savings Performance Contracts, Power Purchase Agreements or Enhanced Use Leases; Consulting on carbon emissions trading programs; Consulting on where to obtain renewable energy credits/certificates; Consulting on greenhouse gas measurement and management; Strategic sustainability performance planning; and Consulting on obtaining high performance sustainable buildings.

SIN 871-299 — Introduction of New Services

As a leader in the Energy Services Sector, NCS is uniquely qualified to work with customers to develop custom service and deliverable packages, as necessary to help them meet their facility performance goals. This might include development of new software, custom technology applications, research and conceptual design, or any number of other novel projects. A new service may be a task, procedure, or product existing in the commercial market which is being developed, improved, or not yet introduced to the Federal Government or not currently available under any GSA Contract, but is categorically related to this procurement.





General Contract Information

Contract No. GS-21F-0031T Solicitation No. 6FEC-E6-030292-B Facilities Maintenance and Management Schedule (03FAC)

SINs:

871-202	Energy Management Planning and Strategies
871-203	Training on Energy Management
871-204	Metering Services
871-205	Energy Program Support Services
871-206	Building Commissioning Services
871-207	Energy Audit Services
871-209	Innovations in Energy
871-211	Energy Consulting Services
871-299	Introduction of New Services

Effective Dates: 10/22/2010 - 10/21/2015

Prompt payment discount: None

Volume Discounts:

1. 5% off rates when ordering \$100,000 or more on a single order for a single location

2. 10% off rates when ordering \$200,000 or more on a single order for a single location

Minimum order: \$1000

Maximum order: \$1,000,000

Contact Information:

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Rate Table

LABOR CATEGORY	<u>Year 1</u> 10/1/2010 - 9/30/2011 (\$/hour)	<u>Year 2</u> 10/1/2011 - 9/30/2012 (\$/hour)	<u>Year 3</u> 10/1/2012 - 9/30/2013 (\$/hour)	<u>Year 4</u> 10/1/2013 - 9/30/2014 (\$/hour)	<u>Year 5</u> 10/1/2014 - 9/30/2015 (\$/hour)
Principal	206.54	214.80	223.39	232.33	241.62
Project Manager	141.05	146.69	152.56	158.66	165.01
Commissioning Authority	176.31	183.37	190.70	198.33	206.26
Commissioning Engineer	141.05	146.69	152.56	158.66	165.01
Commissioning Technician	80.60	83.82	87.18	90.66	94.29
Senior Energy Engineer	141.05	146.69	152.56	158.66	165.01
Energy Engineer	125.94	130.98	136.15	141.66	147.33
Energy Analyst	120.90	125.74	130.76	135.99	141.43
Energy Auditor	120.90	125.74	130.76	135.99	141.43
LEED Accredited Professional	141.05	146.69	152.56	158.66	165.01
Professional Engineer	141.05	146.69	152.56	158.66	165.01
Systems Integrator	120.90	125.74	130.76	135.99	141.43
Software Developer	141.05	146.69	152.56	158.66	165.01
Administrative Assistant	55.41	57.63	59.94	62.33	64.82

Rates include 0.75% GSA Industrial Funding Fee (IFF)

Volume Discounts:

- 1. 5% off rates when ordering \$100,000 or more on a single order for a single location
- 2. 10% off rates when ordering \$200,000 or more on a single order for a single location





Labor Category Descriptions and Relevant SINs

Relevant SIN(s): 871-202, 871-203, 871-204, 871-205, 871-206, 871-207, 871-209, 871-211, 871-299

Title: Principal

Functional Duties/Responsibilities: This category encompasses top management including the CEO, President, COO, CFO, and other senior-level staff. This person will oversee and direct all business and employee activities; manage all personnel; direct business development activities; develop in-depth analysis of system energy efficiency and the projected efficiency after energy enhancements; develop performance tests, analyze results; prepare analysis for technical report; and engineer retrofits and new designs for building energy systems.

Responsibilities include:

• Management of the firm's people, operations and market strategy.

• Providing high-level technical or managerial input to work groups during project execution.

Relevant SIN(s): 871-202, 871-203, 871-204, 871-205, 871-206, 871-207, 871-209, 871-211, 871-299

Title: Project Manager

Functional Duties/Responsibilities: This category encompasses individuals who manage all scales, types and phases of projects, which most often include engineering, best practice implementation and management of procurement and operations relative to the development of building energy system evaluations, design and construction.

Responsibilities include:

- Technical leadership, planning, and implementation for the procurement and management of commissioning and facility energy management services.
- Assists in developing and enforcing work standards, provides quality assurance, assigns contractor schedules, and communicates goals, objectives, and policies.
- Provides financial management and project administration, including budgeting, financial reporting, and manpower and resource planning. Supervises and directs staff on a daily basis.
- Preparation of estimates and work plans.
- Supervision of projects teams and management of project scope, budget, and schedule.
- Planning, organization and coordination of project in accordance with established policies, procedures, systems, and requirements.
- · Accountability for budget and financial resources.

Relevant SIN(s): 871-206, 871-207

Title: Commissioning Authority

Functional Duties/Responsibilities: This category encompasses management of all aspects of the total building commissioning process.





- Organization and management of the commissioning services scope of work, including the planning and production of all associated contract activities.
- Input of high-level technical or managerial information to commissioning team during project execution.
- Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing
 work discrepancies, supervising commissioning personnel and communicating policies, purposes, and
 goals of the organization to subordinates.
- Supervises activities involving a complex network of individuals and teams working in separate offices and locations.

Relevant SIN(s): 871-206, 871-207

Title: Commissioning Engineer

Functional Duties/Responsibilities: This category encompasses discipline specific commissioning service, i.e., mechanical, electrical, fire protection, lighting, renewable energy, building envelope, security, or architectural.

Responsibilities include:

- Development of installation and test criteria and associated checklists.
- Performance of project, system, and component specific pre-functional and functional testing.
- Testing, Adjusting and Balancing verification.

Energy Auditing.

Relevant SIN(s): 871-206, 871-207

Title: Commissioning Technician

Functional Duties/Responsibilities: This category encompasses discipline specific commissioning service, i.e., mechanical, electrical, fire protection, lighting, renewable energy, building envelope, security, or architectural, most often with oversight by a Commissioning Engineer or Commissioning Authority.

Responsibilities include:

- Development of installation and test criteria and associated checklists.
- Performance of project, system, and component specific pre-functional and functional testing.
- Testing, Adjusting and Balancing verification.
- Energy Auditing.
- System and/or component specific evaluation, adjusting, or installation oversight.

Relevant SIN(s): 871-100, 871-203, 871-202, 871-204, 871-205, 871-206, 871-207, 871-209, 871-299

Title: Senior Energy Engineer

Functional Duties/Responsibilities: This category encompasses the development of in-depth analysis of existing MEP system's performance relative to designed performance characteristics and potential performance improvements through system/component adjustments or alterations.

- Evaluation of existing building MEP system performance via on-site and/or statistical analysis.
- Develop of performance tests and test result analytics.





- Preparations of test and information evaluation reports.
- Provide input relative to suggested retrofits and new designs for MEP and building energy systems.

Relevant SIN(s): 871-100, 871-203, 871-202, 871-204, 871-205, 871-206, 871-207, 871-209, 871-211, 871-299

Title: Energy Engineer

Functional Duties/Responsibilities: This category encompasses the assistance with development of indepth analysis of existing MEP system's performance relative to designed performance characteristics and potential performance improvements through system/component adjustments or alterations, with oversight by a Senior Energy Engineer or other senior personnel.

Responsibilities include:

- Assist with evaluation of existing building MEP system performance via on-site and/or statistical analysis.
- Assist with development of performance tests and test result analytics.
- Preparations of test and information evaluation reports for internal review and analysis.
- Provide input relative to suggested retrofits and new designs for MEP and building energy systems.

Relevant SIN(s): 871-202, 871-203, 871-204, 871-205, 871-206, 871-207, 871-209, 871-299

Title: Energy Analyst

Functional Duties/Responsibilities: This category collection, evaluation and preparation of evaluation reports relative to building energy performance data.

Responsibilities include:

- Collect and evaluate manufacturer's equipment data.
- Collect and evaluate utility performance data.
- Collect and evaluate metered data.
- · Assist as needed.

Relevant SIN(s): 871-202, 871-204, 871-205, 871-206, 871-207, 871-209, 871-299

Title: Energy Auditor

Functional Duties/Responsibilities: This category encompasses the on-site facility, MEP equipment and component audit and evaluation, and preparation of evaluation reports relative to building energy performance data observed and collected.

- On-site collection and evaluation of manufacturer's equipment data.
- On-site review of existing facility conditions, equipment and components.
- On-site evaluation of low-cost/no-cost facility performance improvement opportunities.
- Assist with back end data analysis and determination of facility energy performance improvement opportunities.





Relevant SIN(s): 871-202, 871-205, 871-206, 871-207, 871-211, 871-299

Title: LEED Accredited Professional

Functional Duties/Responsibilities: This category encompasses understanding and management of LEED Certification associated activities.

Responsibilities include:

• Management of the LEED Certification process activities and documentation.

Minimum Education: Possesses a B.A.

Minimum Experience Requirements: 2-10 years of experience.

Required/Supplemental Certifications: USGBC LEED Accredited Professional Certification.

Relevant SIN(s): 871-202, 871-203, 871-204, 871-205, 871-206, 871-207, 871-209, 871-211, 871-299

Title: Professional Engineer

Functional Duties/Responsibilities: Makes authoritative decisions and recommendations having major impact on extensive engineering activities of the company. Initiates and maintains extensive contacts with key engineers and officials of other organizations and companies, requiring skill in persuasion and negotiation of critical issues. Demonstrates a high degree of creativity, foresight, and mature judgment in anticipating and solving unprecedented engineering complexities; determining program objectives and requirements; organizing programs and projects; and developing standards and guidelines for diverse engineering activities.

Typical duties and responsibilities include one or both of the following:

- 1) Planning, organizing, and supervising work of staff of engineers and technicians
- 2) As individual researcher or consultant, is recognized leader and authority in company in broad area of specialization or intensely specialized field.

Relevant SIN(s): 871-202, 871-204, 871-205, 871-206, 871-207, 871-209, 871-211, 871-299

Title: Systems Integrator

Functional Duties/Responsibilities: This category encompasses project management for various assignments involving, predominantly, systems integration.

- Prepares documentation to substantiate the project.
- Provides input on which analyses of technologies are made.
- Receives input from subordinates and other activities within the program and from government sponsors.
- Spends some time on development or prototyping sites, travels to the sponsor's site to provide briefings on the status of particular development or prototyping events or portions of the overall program.
- Provides expertise on space and/or communications system and military applications of space and/or communications system and has a working knowledge of ground operations.
- Provides ongoing quality control and development of the commissioning database.





• Maintains security and customer services issues.

Relevant SIN(s): 871-202, 871-204, 871-205, 871-206, 871-207, 871-209, 871-299

Title: Software Developer

Functional Duties/Responsibilities: This category encompasses software engineering tasks.

Responsibilities include:

- Provides services for the preparation of such software documents as necessary in support of the goals of the Contractor Program Manager and the Government sponsor(s).
- Develops new coding and algorithms in support of mission areas to include modeling and simulation and prototyping efforts.
- Provides input on which decisions for software development and or modifications of specified items or systems can be performed.
- Provides expertise on commissioning and/or facility energy management systems and applications of these systems and has a working knowledge of associated operations.

Relevant SIN(s): 871-202, 871-204, 871-205, 871-206, 871-207, 871-209, 871-299

Title: Administrative Assistant

Functional Duties/Responsibilities: This category encompasses general clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings.

- Open, sort, and distribute incoming correspondence, faxes, and emails.
- Performs general office duties such as ordering supplies, filing and maintaining records management systems.
- Performs basic bookkeeping work.
- Prepares correspondence containing routine inquiries.
- Maintains management or office schedules.
- Compiles, transcribes, and distributes minutes of meetings.
- Prepares invoices, reports, memos, letters, financial statements, and other documents using word processing, spreadsheet, database or presentation software.





NCS Contact Information

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